ATTACHMENT A
Remarks

Claims 1-3, 5, 9, 12, 33-35, 40 and 44-46 have been rejected under 35 USC 103(a) as being "unpatentable over" Christy in view of the newly cited Arnold et al. patent. Claims 10, 11, 13-20 and 41-43 have been rejected under 35 USC 103(a) as being "unpatentable over" the Christy and Arnold patents "and further in view of Greenaway." On the other hand, claims 21-24 and 26-32 have been allowed and claims 7, 8, 38 and 39 have been "objected to as being dependent upon a base claim" but have been indicated to be "allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims." While Applicant does not necessarily agree with the rejections of the claims, all of the rejected independent claims have been amended to place them in condition for allowance by incorporating the subject matter of the allowable claims or have simply been cancelled.

More specifically, claim 1 has been amended to include the subject matter of claim 7, claim 8 has been rewritten in independent form as new claim 47, and claims 7 and 8 have been cancelled along with claim 5. In addition claims 13-20 have been cancelled and claims 24, 26 and 27 have been amended so as to bring the claims more clearly in line with claim 21. All of these latter claims have been allowed. Finally, claim 33 has been amended so as to include the subject matter of allowable claim 38 and claim 39 has been amended to depend from claim 33.

Accordingly, all of the claims now presented have either been previously indicated to be allowable or are based on claims said to be allowable if rewritten in independent form.

Thus, Allowance of the application in its present form is respectfully solicited.

END REMARKS

ATTACHMENT B
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A machine readable multiple layer label to be read by a sensor, said label comprising:

a plurality of machine readable marking layers stacked one upon another, each said marking layer encoding an identification symbol detectable using a sensor selected from the group consisting of capacitance, thermal and magnetic sensors~~.~~, wherein said sensor comprises a thermal sensor and wherein one of said marking layers comprises a different medium having characteristics detectable by a sensor other than a thermal sensor.

2. (Original) The machine readable multiple layer label of claim 1, wherein said identification symbol comprises a two-dimensional symbol.

3. (Original) The machine readable multiple layer label of claim 2, wherein said two-dimensional symbol comprises a matrix forming an encoded array.

4-8. (Cancelled)

9. (Original) The machine readable multiple layer label of claim 1 further comprising an opaque layer disposed over said plurality of machine readable marking layers.

10. (Original) The machine readable multiple layer label of claim 1 further comprising at least one neutral layer disposed between two of said plurality of marking layers.

11. (Original) The machine readable multiple layer label of claim 1 further comprising a plurality of neutral layers, each of said neutral layers separating two of said plurality of marking layers.

12. (Original) The machine readable multiple layer label of claim 1 wherein said marking layers are stacked in an offset manner from one another.

13-20. (Cancelled)

21. (Previously Presented) An automatic identification system, said system comprising:

a plurality of machine readable marking layers stacked one upon another, each of said marking layers encoding a respective identification symbol, each of said marking layers comprising a different medium having characteristics detectable by a different sensor; and

sensor means for detecting said respective identification symbol of each of said marking layers, said sensor means comprising a radar sensor for detecting the identification symbol of a first marking layer and a further sensor for detecting the

identification symbol of a second marking layer, said further sensor being selected from the group consisting of ultrasonic, x-ray, capacitance, thermal and magnetic sensors.

22. (Original) The system of claim 21, wherein at least one of said identification symbols comprises a two dimensional symbol.

23. (Original) The system of claim 22, wherein said two-dimensional symbol comprises a matrix forming an encoded array.

24. (Currently Amended) The system of claim 21, wherein ~~said plurality of machine readable marking layers are comprised of the same medium and~~ said further sensor means comprises an x-ray sensor with tomographic capabilities for ready said respective identification symbol from each of said marking layers.

25. (Cancelled)

26. (Currently Amended) The system of claim 21, wherein said ~~different~~ further sensor comprises a sensor of the group consisting of capacitance, thermal and magnetic sensors.

27. (Currently Amended) The system of claim ~~24~~ 21 wherein said sensor comprises an x-ray sensor.

28. (Original) The system of claim 21, further comprising an opaque layer disposed over said plurality of machine readable layers.

29. (Original) The system of claim 21, further comprising at least one neutral layer disposed between two of said plurality of marking layers.

30. (Original) The system of claim 21, further comprising a plurality of neutral layers, each said neutral layers separating any two of said plurality of marking layers.

31. (Original) The system of claim 21, wherein identification symbols of at least two of said marking layers comprises a first symbol fragment and a second symbol fragment.

32. (Original) The system of claim 31 further comprising a processor for assembling said first symbol fragment and said second symbol fragment after detection thereof to thereby form a complete symbol.

33. (Currently Amended) A method of automatic identification, said method comprising the steps of:

applying a multiple marking layer label onto a component, each marking layer encoding a respective identification symbol; and

detecting the respective identification symbol from each marking layer using a sensor selected from the group consisting of capacitance, thermal and magnetic

sensors,

each marking layer comprising a material having different characteristics from that of the other marking layers, and the step of detecting the respective identification symbol comprises detecting the identification symbol of the first layer using thermal sensor and detecting the identification symbol of a further layer using a further, different sensor of said group.

34. (Original) The method of claim 33, wherein the identification symbol comprises a two-dimensional symbol.

35. (Original) The method of claim 33, wherein the two-dimensional symbol comprises a matrix forming an encoding array.

36-38. (Cancelled)

39. (Currently Amended) The method of claim ~~38~~, 33 wherein ~~each marking layer comprises material having different characteristics from that of other said marking layers~~, the step of detecting the respective identification symbol comprises using at least two different sensors, and the different sensors comprise two of the group consisting of x-ray, radar, capacitance, thermal, magnetic, and ultrasonic sensor.

40. (Original) The method of claim 33, further comprising applying an opaque layer over the label.

41. (Original) The method of claim 33, wherein the label further comprises a neutral layer disposed between two of the plurality of marking layers.

42. (Original) The method of claim 33, wherein the respective identification symbol encoded in at least two marking layers comprise a respective symbol fragment.

43. (Original) The method of claim 42, further comprising the step of assembling detected symbol fragments thereby forming a complete symbol.

44. (Original) The method of claim 33, wherein the step of detecting the respective identification symbol from each marking layer comprises the steps of:

collecting analog image signals emitted from the label; and

converting the analog image signals to a digital signal string using an analog to digital converter.

45. (Original) The method of claim 44, further comprising the step of converting the digital signal string into an ASCII data string.

46. (Original) The method of claim 45, further comprising the step of converting the ASCII data string to a video signal that can be displayed on a video monitor.

47. (New) A machine readable multiple layer label to be read by a sensor, said label comprising:

a plurality of machine readable marking layers stacked one upon another, each said marking layer encoding an identification symbol detectable using a sensor selected from the group consisting of capacitance, thermal and magnetic sensors wherein one of said marking layers comprises a different medium having characteristics detectable by a different sensor from the sensors of said group, said different sensor comprising a sensor of the group consisting of x-ray, radar, and ultrasonic sensors.